

CLAIMS

1. A coated super-hard abrasive comprising a core of super-hard abrasive material, an inner layer of a metal carbide, nitride or carbonitride chemically bonded to an outer surface of the super-hard abrasive material and an outer layer of tungsten physically deposited on the inner layer.
2. A coated super-hard abrasive according to claim 1, wherein the outer layer is deposited by physical vapour deposition.
3. A coated super-hard abrasive according to claim 1 or claim 2, wherein the super-hard abrasive material is diamond or cBN based.
4. A coated super-hard abrasive according to claim 3, wherein the inner layer is a titanium carbide coating in the case of a diamond based core, or a titanium nitride or boride coating in the case of a cBN based core.
5. A coated super-hard abrasive according to any one of the preceding claims, wherein no portion of the tungsten coating is carbided.
6. A coated super-hard abrasive according to any one of the preceding claims, wherein the thickness of the outer layer is from about 0.05 μm to about 10 μm .
7. A coated super-hard abrasive according to any one of the preceding claims, wherein the thickness of the outer layer is from about 0.2 μm to about 1 μm .